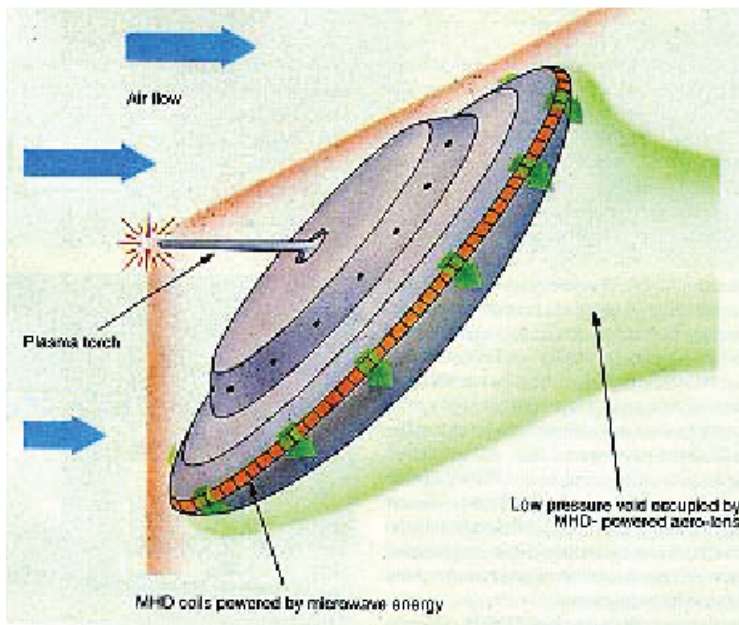
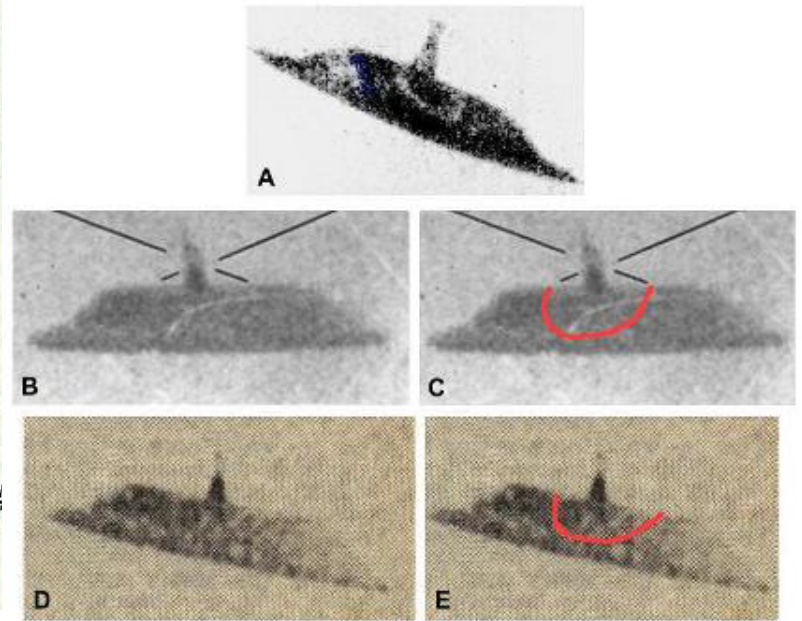


## Lightcraft flying atop a beam of laser light.



Light craft with rectenna (rectifying antennas).



What looks like a rectenna is a UFO photograph.  
McMinnville UFO photographs were taken on a farm near McMinnville, Oregon, United States, in 1950.

Lightcraft flying atop a beam of laser light. disc - a "Lightcraft" - takes to the air, Prof. Leik Myrabo from the Rensselaer Polytechnic Institute explains the design for a hypersonic trans-atmospheric vehicle (Figure 7 and 8). Myrabo has been building on the idea to use lasers to launch satellites since 1972, when it was developed by founder and former CEO of AVCO-Everett, Prof. Arthur Kantrowitz. The article says: "The concept that evolved is a part airship, microwave receiver, and (the smallest part) jet and rocket engine, and as green as any space concept. The 12-person, 20-meter (66 ft) craft would be powered from the Earth's surface to the Moon by sunlight captured by an orbiting power station (1 km diameter, 20 GW power), converted to microwaves, and beamed to rectennas (rectifying antennas) that turn it back into electricity on the Lightcraft. That's where the saucer shape comes from. The airship part is a pressurized helium balloon-type structure made of advanced silicon carbide film (transparent to microwaves) to make the craft partly buoyant and to provide for a large parabolic reflector for the energy beamed from space. The craft would be encircled by two superconducting magnet rings and a series of ion engines, and topped with solar cells (Figure 7). Synthetic diamond and silicon carbide are the best materials to develop cold-emission electron guns powerful to ionize air under atmospheric conditions (see section 1.2). Presently, such cold cathodes are under development for the next generation of flat screen monitors. The same technology could be used to develop a synthetic diamond and silicon carbide based smart skin technology applicable on wing and fuselage surfaces of several square meters. In the case of silicon carbide the skin has to be micro-structured with protected tips whereby synthetic diamond is independent from sharp tips and may be the most promising smart skin material for applications on future hypersonic trans-atmospheric flight vehicles (Figure 8). As Myrabo says: "That (the EHD mode) is just low gear. Switching on the microwave transmitter would make the Lightcraft disappear in less than an eye blink. The microwaves would be focused by the internal reflector to heat the air on one side or the other of the craft and push it in the opposite direction." The principle of the hot plasma spike is shown in Figure 9. "This is used to climb out to a good altitude and beyond the speed of sound where you use the magneto-hydro-dynamic drive," Myrabo continued. Now the craft tilts from flying edgewise to flying flat into the air stream. That seems wrong but for another trick. The microwaves are reflected forward to create a superhot bubble of air above the craft and form an air spike that acts as the nose cone as the Lightcraft accelerates to 25 times the speed of sound." "This cleans up the aerodynamics of a vehicle that does not look like it should fly in that direction," Myrabo said. Even better, when the load is properly balanced the craft sails through the air without leaving a shock wave and virtually no supersonic wake. Water is used by the craft to cool the rectennas and as a propellant in the last stages of ascent."